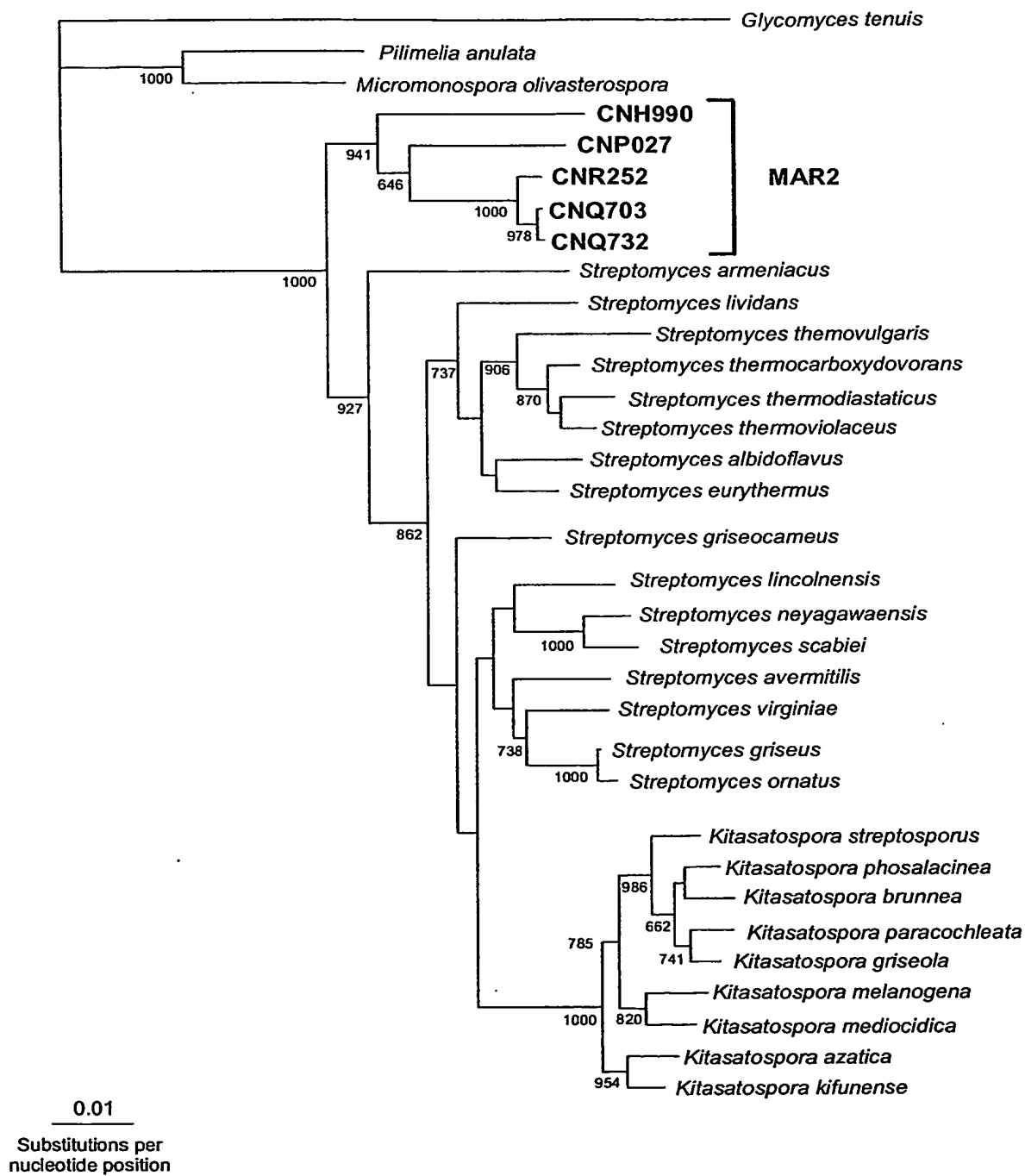FIG. 1

CNQ695   (SEQ ID NO: 1)

GTTTGATTCCCTGCTCAGGACGAACGCTGGCGGCGTGCTTAACACAT
GCAAGTCGAACGATGATCCGGTTTCGGCCGGTGATTAGTGGCGAAC
GGGTGAGTAACACGTGGGTAATCTGCCCTGCACTCTGGGATAAGCC
CGGGAAACTGGGTCTAATACCGGATATGACCTTCGGTCGCATGATC
GTTGGTGGAAAGCTTTTGCGGTGTGGGATGGGCCCGCGGCCTATCA
GCTTGTTGGTGGGGTGATGGCCTACCAAGGCGACGACGGGTAGCCG
GCCTGAGAGGGTGACCGGCCACACTGGGACTGAGACACGGCCCAGA
CTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGCAAG
CCTGATGCAGCGACGCCGCGTGAGGGATGACGGCCTTCGGGTTGTA
AACCTCTTTCAGCAGGGAAGAAGCGCAAGTGACGGTACCTGCAGAA
GAAGCACCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGG
TGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTCGTAGGCGG
CTTGTCGCGTCGGTTGTGAAAGCCCGGGGCTTAACCCTGGGTCTGCA
GTCGATACGGGCAGGCTAGAGTTCGGTAGGGGAGACTGGAATTCCT
GGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAACACCGGTGGCG
AAGGCGGGTCTCTGGGCCGATACTGACGCTGAgGAGCGAAAGCGTG
GGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCTGTAAACGG
TGGGAACTAGGTGTGGGCAGCATTCCACGTTGTCTGTGCCGTAGCTA
ACGCATTAAGTTCCCCGCCTGGGGAGTACGGCCGCAAGGCTAAAAC
TCAAAGGAATTGACGGGGGCCCGCACAAGCGGCGGAGCATGTGGCT
TAATTCGACGCAACGCGAAGAACCTTACCAAGGCTTGACATGCATC
GGAAGCATCCAGAGATGGGTGTGCTCTTTGAGTCGGTGTACAGGTG
GTGCATGGCTGTCGTCAGCTCGTGTCGTGAGATGTTGGGTTAAGTCC
CGCAACGAGCGCAACCCTTGTCCTGTGTTGCCAGCGGAGCCTTCGGG
CTGCCGGGGACTCACGGGAGACTGCCGGGGTCAACTCGGAGGAAGG
TGGGGACGACGTCAAGTCATCATGCCCCTTATGTCTTGGGCTGCACA
CGTGCTACAATGGCCGGTACAATGAGCTGCGATGCCGTGAGGTGGA
GCGAATCTCAAAAAGCCGGTCTCAGTTCGGATTGGGGTCTGCAACTC
GACCCCATGAAGTCGGAGTCGCTAGTAATCGCAGATCAGCATTGCT
GCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACGTCAC
GAAAGTCGGTAACACCCGAAGCCGGTGGCCTAACCCCTTGTGGGAG
GGAGTCGTCGAAGGTGGGACTGGCGATTGGGACGAAGTCG

FIG. 2A

CNQ703.   (SEQ ID NO:2)

AGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACAC
ATGCAAGTCGAACGATGATCCGGTTTCGGCCGGTGATTAGTGGCGAA
CGGGTGAGTAACACGTGGGTAATCTGCCCTGCACTCTGGGATAAGCC
CGGGAAACTGGGTCTAATACCGGATATGACCTTCGGTCGCATGATCG
TTGGTGGAAAGCTTTTGCGGTGTGGGATGGGCCCGCGGCCTATCAGC
TTGTTGGTGGGGTGATGGCCTACCAAGGCGACGACGGGTAGCCGGCC
TGAGAGGGTGACCGGCCACACTGGGACTGAGACACGGCCCAGACTC
CTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGCAAGCCT
GATGCAGCGACGCCGCGTGAGGGATGACGGCCTTCGGGTTGTAAACC
TCTTTCAGCAGGGAAGAAGCGCAAGTGACGGTACCTGCAGAAGAAG
CACCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGTGCAA
GCGTTGTCCGGAATTATTGGGCGTAAAGAGCTCGTAGGCGGCTTGTC
GCGTCGGTTGTGAAAGCCCGGGGCTTAACCCTGGGTCTGCAGTCGAT
ACGGGCAGGCTAGAGTTCGGTAGGGGAGACTGGAATTCCTGGTGTA
GCGGTGAAATGCGCAGATATCAGGAGGAACACCGGTGGCGAAGGCG
GGTCTCTGGGCCGATACTGACGCTGAGGAGCGAAAGCGTGGGGAGC
GAACAGGATTAGATACCCTGGTAGTCCACGCTGTAAACGGTGGGAAC
TAGGTGTGGGCAGCATTCCACGTTGTCTGTCCGTAGCTAACGCATT
AAGTTCCCCGCCTGGGGAGTACGGCCGCAAGGCTAAAACTCAAAGG
AATTGACGGGGGCCCGCACAAGCGGCGGAGCATGTGGCTTAATTCGA
CGCAACGCGAAGAACCTTACCAAGGCTTGACATGCATCGGAAGCATC
CAGAGATGGGTGTGCTCTTTGAGTCGGTGTACAGGTGGTGCATGGCT
GTCGTCAGCTCGTGTCGTGAGATGTTGGGTTAAGTCCCGCAACGAGC
GCAACCCTTGTCCTGTGTTGCCAGCGGAGCCTTCGGGCTGCCGGGGA
CTCACGGGAGACTGCCGGGGTCAACTCGGAGGAAGGTGGGGACGAC
GTCAAGTCATCATGCCCCTTATGTCTTGGGCTGCACACGTGCTACAAT
GGCCGGTACAATGAGCTGCGATGCCGTGAGGTGGAGCGAATCTCAA
AAAGCCGGTCTCAGTTCGGATTGGGGTCTGCAACTCGACCCCATGAA
GTCGGAGTCGCTAGTAATCGCAGATCAGCATTGCTGCGGTGAATACG
TTCCCGGGCCTTGTACACACCGCCCGTCACGTCACGAAAGTCGGTAA
CACCCGAAGCCGGTGGCCTAACCCCTTGTGGGAGGGAGTCGTCGAAG
GTGGGACTGGCGATTGGGACGAAGTCGTAACAAGGTAGCCGTA

FIG. 2B

CNQ732   (SEQ ID NO: 3)

AGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACAC
ATGCAAGTCGAACGATGATCCGGTTTCGGCCGGTGATTAGTGGCGAA
CGGGTGAGTAACACGTGGGTAATCTGCCCTGCACTCTGGGATAAGCC
TGGGAAACTGGGTCTAATACCGGATATGACCTTCGGTCGCATGATCG
TTGGTGGAAAGCTTTTGCGGTGTGGGATGGGCCCGCGGCCTATCAGC
TTGTTGGTGGGGTGATGGCCTACCAAGGCGACGACGGGTAGCCGGCC
TGAGAGGGTGACCGGCCACACTGGGACTGAGACACGGCCCAGACTC
CTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGCAAGCCT
GATGCAGCGACGCCGCGTGAGGGATGACGGCCTTCGGGTTGTAAACC
TCTTTCAGCAGGGAAGAAGCGCAAGTGACGGTACCTGCAGAAGAAG
CACCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGTGCAA
GCGTTGTCCGGAATTATTGGGCGTAAAGAGCTCGTAGGCGGCTTGTC
GCGTCGGTTGTGAAAGCCCGGGGCTTAACCCTGGGTCTGCAGTCGAT
ACGGGCAGGCTAGAGTTCGGTAGGGGAGACTGGAATTCCTGGTGTA
GCGGTGAAATGCGCAGATATCAGGAGGAACACCGGTGGCGAAGGCG
GGTCTCTGGGCCGATACTGACGCTGAGGAGCGAAAGCGTGGGGAGC
GAACAGGATTAGATACCCTGGTAGTCCACGCTGTAAACGGTGGGAAC
TAGGTGTGGGCAGCATTCCACGTTGTCTGTGCCGTAGCTAACGCATT
AAGTTCCCCGCCTGGGGAGTACGGCCGCAAGGCTAAAACTCAAAGG
AATTGACGGGGGCCCGCACAAGCGGCGGAGCATGTGGCTTAATTCGA
CGCAACGCGAAGAACCTTACCAAGGCTTGACATGCATCGGAAGCATC
CAGAGATGGGTGTGCTCTTTGAGTCGGTGTACAGGTGGTGCATGGCT
GTCGTCAGCTCGTGTCGTGAGATGTTGGGTTAAGTCCCGCAACGAGC
GCAACCCTTGTCCTGTGTTGCCAGCGGAGCTTTCGGGCTGCCGGGGA
CTCACGGGAGACTGCCGGGGTCAACTCGGAGGAAGGTGGGGACGAC
GTCAAGTCATCATGCCCCTTATGTCTTGGGCTGCACACGTGCTACAAT
GGCCGGTACAATGAGCTGCGATGCCGTGAGGTGGAGCGAATCTCAA
AAAGCCGGTCTCAGTTCGGATTGGGGTCTGCAACTCGACCCCATGAA
GTCGGAGTCGCTAGTAATCGCAGATCAGCATTGCTGCGGTGAATACG
TTCCCGGGCCTTGTACACACCGCCCGTCACGTCACGAAAGTCGGTAA
CACCCGAAGCCGGTGGCCTAACCCCTTGTGGGAGGGAGTCGTCGAAG
GTGGGACTGGCGATTGGGACGAAGTCGTAACAAGGTAGCCGTA

FIG. 2C

CNR252   (SEQ ID NO:4)

AGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACA
CATGCAAGTCGAACGATGATCCGGTTTCGGCCGGTGATTAGTGGCG
AACGGGTGAGTAACACGTGGGTAATCTGCCCTGCACTCTGGGATAA
GCCTGGGAAACTGGGTCTAATACCGGATATGACCTTCGGTCGCATG
ATCGTTGGTGGAAAGCTTTTGCGGTGTGGGATGGGCCCGCGGCCTAT
CAGCTTGTTGGTGGGGTAGTGGCCTACCAAGGCGACGACGGGTAGC
CGGCCTGAGAGGGTGACCGGCCACACTGGGACTGAGACACGGCCCA
GACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGAA
AGCCTGATGCAGCGACGCCGCGTGAGGGATGACGGCCTTCGGGTTG
TAAACCTCTTTCAGCAGGGAAGAAGCGCAAGTGACGGTACCTGCAG
AAGAAGCACCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAG
GGTGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTCGTAGGC
GGCTTGTCGCGTCGGTTGTGAAAGCCCGGGGCTTAACCCTGGGTCTG
CAGTCGATACGGGCAGGCTAGAGTTCGGTAGGGGAGACTGGAATTC
CTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAACACCGGTGG
CGAAGGCGGGTCTCTGGGCCGATACTGACGCTGAGGAGCGAAAGCG
TGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCTGTAAAC
GGTGGGAACTAGGTGTGGGCAGCATTCCACGTTGTCTGTGCCGCAG
CTAACGCATTAAGTTCCCCGCCTGGGGAGTACGGCCGCAAGGCTAA
AACTCAAAGGAATTGACGGGGGCCCGCACAAGCGGCGGAGCATGTG
GCTTAATTCGACGCAACGCGAAGAACCTTACCAAGGCTTGACATGC
ATCGGAAGCGCCTAGAGATGGGTGTGCTCTTTGAGTCGGTGTACAG
GTGGTGCATGGCTGTCGTCAGCTCGTGTCGTGAGATGTTGGGTTAAG
TCCCGCAACGAGCGCAACCCTTGTCCTGTGTTGCCAGCGGAGCCTTC
GGGCTGCCGGGGACTCACGGGAGACTGCCGGGGTCAACTCGGAGGA
AGGTGGGGACGACGTCAAGTCATCATGCCCCTTATGTCTTGGGCTGC
ACACGTGCTACAATGGCCGGTACAATGAGCTGCGATGCCGTGAGGT
GGAGCGAATCTCAAAAAGCCAGTCTCAGTTCGGATTGGGGTCTGCA
ACTCGACCCCATGAAGTCGGAGTCGCTAGTAATCGCAGATCAGCAT
TGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACG
TCACGAAAGTCGGTAACACCCGAAGCCGGTGGCCTAACCCCTTGTG
GGAGGGAGTCGTCGAAGGTGGGACTGGCGATTGGGACGAAGTCGTA
ACAAGGTAGCCGTA

FIG. 2D

CNP027   (SEQ ID NO:5)

AGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACA
CATGCAAGTCGAACGATGATCCGGCTTCGGTCGGGGATTAGTGGCG
AACGGGTGAGTAACACGTGGGCAATCTGCCCTGCACTCTGGGATAA
GCCTGGGAAACTGGGTCTAATACCGGATATGACCTTCTCTCGCATGG
GGGAGGGTGGAAAGCTTTTGCGGTGCAGGATGGGCCCGCGGCCTAT
CAGCTTGTTGGTGGGGTAGTGGCCTACCAAGGCGACGACGGGTAGC
CGGCCTGAGAGGGTGACCGGCCACACTGGGACTGAGACACGGCCCA
GACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGCA
AGCCTGATGCAGCGACGCCGCGTGAGGGATGACGGCCTTCGGGTTG
TAAACCTCTTTCAGCAGGGAAGAAGCCTTGCCTTTTTGGGTGGGTGA
CGGTACTTGCAGAAGAAGCACCGGCTAACTACGTGCCAGCAGCCGC
GGTAATACGTAGGGTGCAAGCGTTGTCCGGATTTATTGGGCGTAAA
GAGCTCGTAGGCGGCTTGTCGCGTCGATTGTGAAAGCTCAGGGCTTA
ACCCTGGGTCTGCAGTCGATACGGGCAGGCTAGAGTTCGGTAGGGG
AGACTGGAATTCCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAG
GAACACCGGTGGCGAAGGCGGGTCTCTGGGCCGATACTGACGCTGA
GGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTC
CACGCTGTAAACGGTGGGAACTAGGTGTGGGCAGCATTCCACGTTG
TCTGTGCCGTAGCTAACGCATTAAGTTCCCCGCCTGGGGAGTACGGC
CGCAAGGCTAAAACTCAAAGGAATTGACGGGGGCCCGCACAAGCG
GCGGAGCATGTGGCTTAATTCGACGCAACGCGAAGAACCTTACCAA
GGCTTGACATACGCCGGAAAACCATGGAGACATGGTCCCTCTTTGA
GTCGGTGTACAGGTGGTGCATGGCTGTCGTCAGCTCGTGTCGTGAGA
TGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTATCCTGTGTTGCC
AGCAACTCTCTTCGGAGGGGTTGGGGACTCACGGGAGACTGCCGGG
GTCAACTCGGAGGAAGGTGGGGACGACGTCAAGTCATCATGCCCCT
TATGTCTTGGGCTGCACACGTGCTACAATGGCTGGTACAATGAGCTG
CGATGCCGTGAGGTGGAGCGAATCTCAAAAAGCCAGTCTCAGTTCG
GATTGGGGTCTGCAACTCGACCCCATGAAGTCGGAGTCGCTAGTAA
TCGCAGATCAGCATTGCTGCGGTGAATACGTTCCCGGGCCTTGTACA
CACCGCCCGTCACGTCACGAAAGTCGGTAACACCCGAAGCCGGTGG
CCTAACCCCCTTGTGGGGAGGGAGTCGTCGAAGGTGGGACTGGCGA
TTGGGACGAAGTCGTAACAAGGTA

FIG 2E

CNQ140   (SEQ ID NO:6)

AGAGTTTGATCCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAAC
ACATGCAAGTCGAACGATGATCCGGTTTCGGCCGGGGATTAGTGGC
GAACGGGTGAGTAACACGTGGGTAATCTGCCCTGCACTTTGGGATA
AGCCTGGGAAACTGGGTCTAATACCGGATATGACCTTCCTTCGCATG
GGGGTTGGTGGAAAGCTTTTGCGGTGCAGGATGGACCCGCGGCCTA
TCAGCTTGTTGGTGGGGTAGTGGCCTACCAAGGCGACGACGGGTAG
CCGGCCTGAGAGGGTGACCGGCCACACTGGGACTGAGACACGGCCC
AGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGA
AAGCCTGATGCAGCGACGCCGCGTGAGGGATGACGGCCTTCGGGTT
GTAAACCTCTTTCAGCAGGGAAGAAGCCTTGCCTTTTGGGTGGGTG
ACGGTACTTGCAGAAGAAGCACCGGCTAACTACGTGCCAGCAGCCG
CGGTAATACGTAGGGTGCAAGCGTTGTCCGGATTTATTGGGCGTAA
AGAGCTCGTAGGCGGCTTGTCACGTCGATTGTGAAAGCTCAGGGCTT
AACCCTGGGTCTGCAGTCGATACGGGCAGGCTAGAGTTCGGTAGGG
GAGACTGGAATTCCTGGTGTAGCGGTGAAATGCGCAGATATCAGGA
GGAACACCGGTGGCGAAGGCGGGTCTCTGGGCCGATACTGACGCTG
AGGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGT
CCACGCTGTAAACGGTGGGAACTAGGTGTGGGCAGCATTCCACGTT
GTCTGTGCCGCAGCTAACGCATTAAGTTCCCCGCCTGGGGAGTACGG
CCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGCCCGCACAAGCG
GCGGAGCATGTGGCTTAATTCGACGCAACGCGAAGAACCTTACCAA
GGCTTGACATACATCGGAATCTGCTGGAGACAGTAGCGCTCTTTGAG
TCGGTGTACAGGTGGTGCATGGCTGTCGTCAGCTCGTGTCGTGAGAT
GTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTATTCTGTGTTGCCA
GCATGCCCTTTCGGGGGTGATGGGGACTCACGGGAGACTGCCGGGG
TCAACTCGGAGGAAGGTGGGGACGACGTCAAGTCATCATGCCCCTT
ATGTCTTGGGCTGCACACGTGCTACAATGGCTGGTACAATGAGCTGC
GATACCGTGAGGTGGAGCGAATCTCAAAAGCCAGTCTCAGTTCGG
ATTGGGGTCTGCAACTCGACCCCATGAAGTCGGAGTCGCTAGTAATC
GCAGATCAGCATTGCTGCGGTGAATACGTTCCCGGGCCTTGTACACA
CCGCCCGTCACGTCACGAAAGTCGGTAACACCCGAAGCCGGTGGCC
TAACCCCTTGTGGGAGGGAGCTGTCGAAGGTGGGACTGGCGATTGG
GACGAAGTCGTAACAAGGTAGCCGTA

FIG. 2F

CNQ259 (SEQ ID NO:7)

AGAGTTTGATCCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAAC
ACATGCAAGTCGAACGATGAACCGGTTTCGGCCGGGGATTAGTGGC
GAACGGGTGAGTAACACGTGGGTGACCTGCCCTGCACTCTGGGATA
AGCCCGGGAAACTGGGTCTAATACTGGATATGACCGGTGGCCGCAT
GGTCTGCCGGTGGAAAGCTTTATGCGGTGTGGGATGGGCCCGCGGC
CTATCAGCTTGTTGGTGGGGTGATGGCCTACCAAGGCGACGACGGG
TAGCCGGCCTGAGAGGGTGACCGGCCACACTGGGACTGAGACACGG
CCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGG
CGGAAGCCTGATGCAGCGACGCCGCGTGAGGGATGACGGCCTTCGG
GTTGTAAACCTCTTTCAGCAGGGAAGAAGCGCAAGTGACGGTACCT
GCAGAAGAAGCACCGGCTAACTACGTGCCAGCAGCCGCGGTAATAC
GTAGGGTGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTCGT
AGGCGGCCTGTCGCGTCGATTGTGAAAGCCCGGGGCTTAACTCCGG
GTCTGCAGTCGATACGGGCAGGCTAGAGTTCGGTAGGGGAGACTGG
AATTCCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAACACC
GGTGGCGAAGGCGGGTCTCTGGGCCGATACTGACGCTGAGGAGCGA
AAGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCTG
TAAACGGTGGGAACTAGGTGTGGGCGACATTCCACGTTGTCTGTGCC
GTAGCTAACGCATTAAGTTCCCCGCCTGGGGAGTACGGCCGCAAGG
CTAAAACTCAAAGGAATTGACGGGGGCCCGCACAAGCGGCGGAGC
ATGTGGCTTAATTCGACGCAACGCGAAGAACCTTACCAAGGCTTGA
CATACGCCGGAAATCTCTGGAGACAGGGGCTCCCTTTTGGGCCGGT
GTACAGGTGGTGCATGGCTGTCGTCAGCTCGTGTCGTGAGATGTTGG
GTTAAGTCCCGCAACGAGCGCAACCCTTGTCCTGTGTTGCCAGCAAC
ACCTTCGGGTGGTTGGGGACTCACGGGAGACTGCCGGGGTCAACTC
GGAGGAAGGTGGGGACGACGTCAAGTCATCATGCCCCTTATGTCTT
GGGCTGCACACGTGCTACAATGGCCGGTACAAAGGGCTGCGATGCC
GTGAGGCGGAGCGAATCCCAAAAAGCCGGTCTCAGTTCGGATTGGG
GTCTGCAACTCGACCCCATGAAGTCGGAGTCGCTAGTAATCGCAGA
TCAGCAGTGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCC
CGTCACGTCACGAAAGTCGGTAACACCCGAAGCCGGGGCCTAACCC
TCTGGGAGGGAGCCGT

FIG. 2G

Escherichia coli str. MG1655 (U00096)

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AAAUUGAA-GAGUU-U-GA-U-CAU-G
GCUC-A-G-AUU-GAAC-GC--U-GGC-GGC-A-GG-C-CU--AA-CACA-UGCAA----
G-UC-GA-ACG--GU-AA-CAG--------------------------------------
-------------------------------GAAACAG-CU-------------------
---------------UG-CU-GUUUC----------------------------------
---------------------------------------G-CUG-AC--GAGUG-
G-C--GG--A-CG-GG-U-GAGU---AAU-GU-CUGGG-A-A--ACU-GC-CUGA---U-
GG-A-G-G-GG-GAU-AA-CUA------------------------------CU-G-GAAA-
C-GGU-A-G--CUAAUACC-GC--AU-AAC-----------------------------
----------------------------------------------GUC---GCA
A----GAC----------------------------CAAA------GAGGGG-GA--CC-----
------------------------------------------------------UUCG---
------------------------------------------------GG---CCUCU
-U--G--C----CA-UCAG--AUG-----U-GCCCAG------AU-----GGG--AUUA-
G-CU-AG---UAGG-UG-GG-GU-AAC-GG-C-UC-ACC-UA-GGC-GA-CGA-------
------UC-CC-U-AG-C-UG-G-UCU--G-AGA-GGAU---GA-C--CAG-C-C-AC-A-
CU-GG-A-A-CU-GA-GA-CAC-G--GUC-C-AG-A--C-UCC-UACG--GGA-G--GC-
AG-C-A---GU-GGGG--AAU-AUU-G-CA--CA-AU--GG-GC-GCAA-GCC-UGA-UG
C-A--GC-CAU-GCC-GC-GU--G-U-AU-G-AA-GAA--G-GCC--UU-CG--GG-UU-
GUAAA------------------G-UAC--UUU-C-AG-CG--GG-GAG--GA-A-GG
-GA--GUA-AAG----UUAAUAC-----CU-U-U-GC-UC-------------------A-
UU-GA-CGUU-A-CC-C-G-C-AG-AA--GAA-G---------C-ACC-GG-CU-----A
A--CUC-CGUGCCA--GCA--GCC-GC-GGU-A-AU-A-C-G-GAG-GGUG-C---AAG-
CG-UUA-AU-C--GGAAUUA---CU-GGGC-G-UAAA-GCGC-ACG-CAG-GC-G---GU
-UU-G-UU-AA----------------------------------------------GU
CA-G---AUGUG-AAA-UC------CCC-GGG-C-UCAA--CCU-GG-G-AAC--UG-CA
U-CU-GA-UAC-U-GGCA-AG-C--UU-G--AGUC-----UCG-UA-GAG-GG------G
GG-U--AGAAUU-CCAGGU-GUA-GC-G-GUGAAA-UGC-GU-AGAG-AUC---------
----------------------UG-GAGG-AAU-A-CCGG--U-G-GC-GAA-G-GCG-G
--CCCCCUG---------GACG-------AA-GACU--GACG-CUCAG-G----------
---UGC-GAAA---GC-GU-GG-GGA-GC-AAA-CA--GGAUUA--GA-UAC-CCU----
-GG-UA-GUC----CAC-G-C--C-GU--AAAC-GAU--GUC--GA-CU--------UG
-GA-GG-UUGUG-CC-----------------------------CUUGA-----------
---------------------GG-C-GU-GGC-UUCCGGA-------GC-UAA----CG-CG-
UUAA-GUCG-AC-CG-CCU-G-GG--GAGUAC-GGCC---GCAA---G--UU-AAAACUC
---AAA-UGAAU-U-G-A-CGGG-G-G-C-CC--GC--A--CA-A-GC-G-GUGG-A-GC
A-U-GU-GGU-UUAA-UU-CG--AUGCAACG--CGAA--GAA-CC-UUA-CCUGG-UC--
-UUG-AC---A-UC-----------C---ACGG----AA--GUU-UU-CA--GAGA--U
-GA-G-AAU-G----UG----------CC--UU----------------------------
-------------------------------------------------CG-GG-------
-----AA------CCG-UG-AGA-C-----------------------------------
-------------------A--GGU-GC-UGCAUGG-CUG-UCG-UCA--GC-U---CG
-UGU--U--GUGA-AAUGU-UGG-G--UUAAGU-CCCGCAA-------CGA-G-C--GC
-AACCC-UU-A-UC--CUU-UG--UUGC-CAG-CGG-----------------------
```

FIG. 3A

```
----UCCGG------------------------------------------------------------
---------------------------------------------------------------------
---------------------------------------------------------------------
---------------------------------------------------------------------
---------------------------------------------------------------------
------CCGGG--AA-CU-C-A-AAG-GA-GA-CU-G--CCA--GU--GAUAA--A-CU-
G--G-AGG-A-AGG-UG-GGG--AU-G-AC-G--UC-A-AGUC--AUC-AU-G-GC-CCU
---UAC-G-AC-CA-GG-GC-U-ACA-CA-CGUG--CUA-CAAU-GGC-G-CA-U-A--C
AAA-GAGA-A-G-C-GA-CCU-C--GCGA-GAGC----------AA-GCGGA-CCUCAU
-AAA-G-UG-C-GUC--GUAGUC-CGGAU-UGGA-GU-C--UGCAACUC--GACUCCA-U
GAA-G-U-CG-GAAU-CGC--U-AGUA--AU-CGU-GGA--UCAGAAU---GC-CA-CG-
GU-G-AAUAC-GUU-CC-C-GGG-CCUUGUA----CA-CACC--GCCC-GUC-ACA----
-CCA-UGGGA--GU-GGG-UU-GC-AAAA-GAA--G-UAGG---UAG-C-UU-AA-CC--
---------------------------------------------------------------------
----UUCG-------------------------------------------------------------
--------------------GGAGG-G-CG-CU-UA-C-CA-CU-UU-GU-------------
---GAUU-CA-UG-ACU-GGGG-UG---AAGUC-GUAA-C--AAGG-UA-ACC-GUAGG-
GGA-A-CCUG--CGGU--UG-GAUCACCUCCUUA
```

FIG. 3B